

SR Exchange Rate Determination

Relationship between Interest Rates
and Exchange Rates

Interest and Exchange Rates

- We have previously discussed why SR exchange rates may fluctuate
- Here are some additional potential influences on SR exchange rates
 - Interest rate changes
 - Changes in the expected future spot rate (er^e)

Return on Foreign Assets

- What determines the expected return on a foreign asset? (eg. A bond denominated in Mexican pesos)
 - Basic return on the bond itself
 - Expected gain loss on currency exchanges
- Recall that the real return on a domestic investment is equal to the (Nominal Return) – (Inflation Rate) - For an international investment, we must consider exchange rate changes as well.

Example #1

- Suppose you have \$1000 to invest
- Current US\$/MXP exchange rate is 3MXP/1\$
- Return on Mexican Bond (i_f) = 5%
- Suppose, after 1 year, (unexpected) 3.3% depreciation of MXP
- What is the real return on the bond?

- We can extend this example by including the domestic interest rate (i) and the expected future exchange rate (er^e)
- Suppose that (i) changes while i_f and er^e remain constant
 - This should cause the domestic currency to appreciate

Example #2

- Suppose US, Swiss 90-day bonds
- US interest rate (i) = 9%
- Swiss interest rate (i_f) = 5%
- $er = \$.50/1SF$
- $er^e = \$.505/1SF$

What will happen to the current spot rate if i rises to 11%?
If i_f rose to 7%?

Example #3

- What happens if the expected future spot rate (er^e) changes?
- Suppose US, Swiss 90-day bonds
- US interest rate (i) = 9%
- Swiss interest rate (i_f) = 5%
- $er = \$.50/1SF$
- $er^e = \$.505/1SF$

What will happen to er if er^e changes to $\$.515/1SW$?
